




Gigantic ascending aortic aneurysm with consequently severe aortic regurgitation and dilatated cardiomyopathy: a case report

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Introduction: An ascending aortic aneurysm is defined as localized dilatation of aorta. We classify thoracic aortic aneurysms into aortic root or ascending aortic aneurysms (most common, ~60%), followed by descending aortic aneurysms (~35%) and aneurysms of aortic arch (<10%). It is a disease of insidious progression which is initially mostly asymptomatic. Clinical presentation depends on the size and rate of growth of the disease itself, which sometimes makes it difficult to recognize until first complications arise, and it is unfortunately in many cases initially presented by aortic dissection.^{1,2}

Case report: 53-year-old patient without previous medical history reports to the hospital because of shortness of breath and occasional chest tightness, which he notices for the past two months. Clinically there is audible diastolic murmur next to the left edge of sternum and peripheral congestion. Laboratory tests excluded acute coronary syndrome, NT-proBNP was elevated at 2013 ng/L. Echocardiographically we verified significant dilated ascending aorta size (75-84-82-80 mm) with consequently severe aortic regurgitation (AR PHT 112 ms) and dilated left ventricle with reduced systolic function (LVEF 36%). CT angiography excluded dissection and confirmed echocardiographic test findings of ascending aorta. Coronary angiography was performed, epicardial blood vessels were without stenosis. This patient was presented to cardiac surgeon and upon completion of preoperative assessment, Bentall procedure was performed – reconstruction of ascending aorta and a replacement of the aortic valve with a composite graft. Postoperative progress went without complications, and the subsequent pathohistological test result was unremarkable.

Conclusion: Our case presentation is interesting and unusual because of the clinical presentation of the gigantically dilated aorta which is often manifested by dissection. Here it was camouflaged by clinical picture of the initial heart failure which in its basis had critical phase of the underlying disease. These findings should be taken into consideration and carefully looked into in everyday medical practice.

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LITERATURE

1. Elefteriades JA. Natural history of thoracic aortic aneurysms: indications for surgery, and surgical versus nonsurgical risks. *Ann Thorac Surg.* 2002 Nov;74(5):S1877-80; discussion S1892-8. [https://doi.org/10.1016/S0003-4975\(02\)04147-4](https://doi.org/10.1016/S0003-4975(02)04147-4)
2. Mathur A, Mohan V, Ameta D, Gaurav B, Haranahalli P. Aortic aneurysm. *J Transl Int Med.* 2016 Apr 1;4 (1):35-41. <https://doi.org/10.1515/jtım-2016-0008>